#### LABORATORY ANALYST

#### FLSA STATUS:

Non-Exempt

#### **CLASS SUMMARY:**

The Laboratory Analyst is the third level in a four level Utilities Laboratory series. In addition to performing standardized analyses, incumbents are responsible for serving as a lead worker to other Laboratory Technicians and performing more complex chemical and bacteriological analyses, maintaining instrumentation, monitoring compliance with quality assurance standards, and preparing reagents and media, ensuring precision and accuracy of results.

The Laboratory Analyst is distinguished from the Laboratory Technician by its responsibility for making work assignments, performing more advance and complex analyses, overseeing the work of other Laboratory Technicians, training, ordering and distributing supplies, preparing reports, and performing administrative tasks in the absence of the supervisor. The Laboratory Analyst is distinguished from the Laboratory Specialist, which is responsible for performing advanced environmental analyses using sophisticated instrumental techniques.

TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)		FRE- QUENCY
1.	Makes work assignments, oversees the work of other staff, trains, prepares reports, and performs administrative tasks in the absence of the supervisor.	Daily 10%
2.	Records and maintains a variety of laboratory data in applicable logs, forms, and/or automated computerized systems.	Daily 5-10%
3.	Performs a variety of administrative activities in support of laboratory operations, which includes: reading and responding to a variety of inquiries and communications; participating in the review and updating of standard operating procedures; and/or, performing other related activities.	Weekly 5%
4.	May prepare and maintain records related to operational activities.	As Required
5.	Performs routine and more complex qualitative and quantitative chemical and biochemical analyses including but not limited to water, groundwater, wastewater, biosolids, soils, sludge's or other materials utilizing standardized methods.	Daily 70%
6.	Operates, calibrates, and maintains a variety of laboratory devices and equipment.	Weekly 10%
7.	Assists laboratory personnel in the performance of more complex tasks and analyses.	Weekly 5%

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TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)		FRE- QUENCY
8.	Develops analytical methods, establishes detection limits and quality assurance criteria to conform with applicable regulatory agency requirements	Occasion- ally 5%
9.	Assists in the development and maintenance of laboratory quality control and quality assurance programs, including the preparation and maintenance of associated charts, the preparation of samples for analysis, and the validation of data based on established quality control criteria.	Monthly 10%
10.	Performs other duties of a similar nature or level.	As Required

## **Training and Experience** (positions in this class typically require):

 Bachelor's Degree in Chemistry, Biochemistry, Biology or a natural or physical science, and two years of experience as a Laboratory Technician, in an environmental laboratory for testing of water and wastewater;

#### OR

• An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

## **<u>Licensing Requirements</u>** (positions in this class typically require):

- Basic Class C License
- California Water Environment Association Grade II Laboratory Analyst Certification

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### **Knowledge** (position requirements at entry):

#### Knowledge of:

- Quality control and quality assurance practices associated with a laboratory
- Organic and inorganic chemistry principles
- Biological techniques
- Equipment sterilization practices
- Modern laboratory techniques and procedures as related to the analysis of environmental samples
- Mathematical concepts
- Statistical analysis, theories and concepts
- Applicable equipment utilized in a laboratory setting
- Recordkeeping principles and practices
- Data collection and analysis techniques
- total organic carbon and UV/visible spectrophotometer techniques
- Applicable computer software packages
- Handling acids and other hazardous chemicals
- Safe work practices and procedures

#### **Skills** (position requirements at entry):

#### Skill in:

- Prioritize and assigning work; detail oriented and ability to multi-task
- Training employees in proper work methods
- Analyzing a variety of samples in a laboratory setting
- Performing a variety of scientific tests and analyses
- Safely operating and maintaining applicable tools and equipment
- Evaluating data utilizing established guidelines
- Preparing and performing mathematical calculations
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the
  general public, business, organizations, elected and appointed officials, media, etc. sufficient
  to exchange or convey information, give/receive work direction

#### **Physical Requirements:**

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling and crouching.

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals and oils.

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## Note:

The above job specification is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

## **Classification History:**

Draft prepared by Fox Lawson & Associates (LM)

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Reviewed by the City of Fresno

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